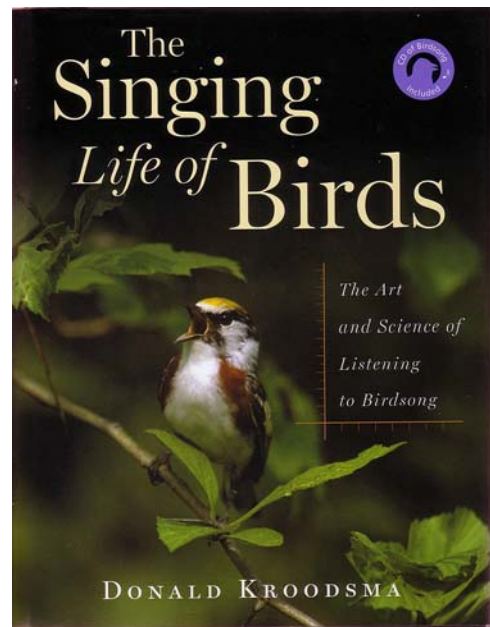


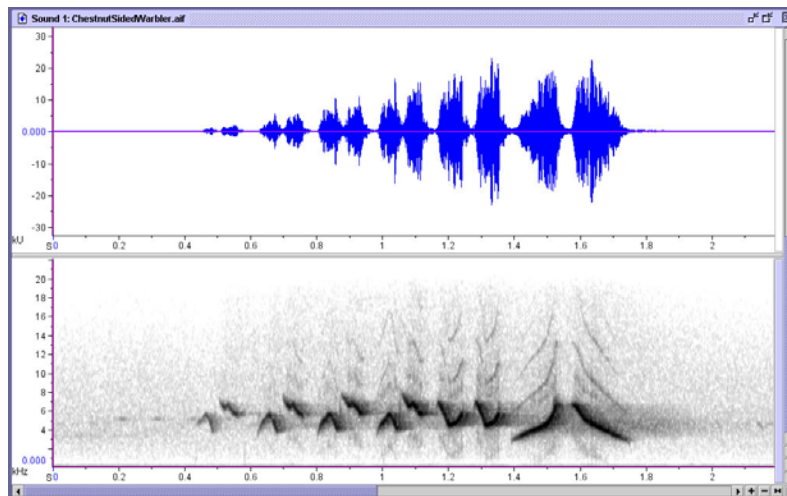
Reading Nature: The Singing Life of Birds: The Art and Science of Listening to Birdsong (NY: Houghton Mifflin, 2005).

Review by Tom Murphy, Mansfield University, Mansfield, PA

Early on a cool summer morning, I joined a small group of fellow nature writing conference participants for a bird walk. Nothing reinforces humility like watching birds with experts and some of those folks were experts. One thing I have noticed about expert birdwatchers is that they listen more than they watch. I also realized, as they called out the names of birds they heard, that knowing what bird you are looking for has some advantages. I resolved to learn more bird songs and calls, and when I got home from the conference I began to listen to bird tapes to sharpen my skills. Unfortunately, all I really seemed to accomplish was that, when I heard a bird, I would think, "Yes! That's one of the birds I heard on the tape!" The name always seemed to elude me, and many of the songs I heard I did not recognize at all.



So I was relieved to read how Donald Kroodsma, the author of *The Singing Life of Birds: The Art and Science of Listening to Birdsong*, struggled with birdsongs until he made sound graphs or sonograms that display birdsongs the way a musical score displays music so he could both see and hear the nuances in a bird's song. The book is full of such diagrams and each one is keyed to a track on the accompanying CD, and looking at the sonogram while listening to the song does help me hear more clearly the shape of each song.



But the book is more than diagrams; it is also full of stories that bring the diagrams to life. We follow along as he hikes along a power line clearing, listening successively to 22 chestnut-sided warblers (whose Latin name is *Dendroica pennsylvanica*, by the way), each in the center of his own

territory singing his own, unique, pre-dawn song. Then we sit with him as he awaits the sunrise and the change that is about to take place in the songs. Just as one bird signaled the beginning of the predawn song, another signals the start of the dawn song, all of which end in MEETCHA. Only at dawn the songs are not unique; he hears only three different ones. Once he finishes hiking back through the 22 birds listening and recording, he sits down with a bowl of cereal in one bird's territory and reflects on his history with this bird species and the scientific issues involved in its song.

For it is the questions even more than the answers that make this book interesting. We see how researching one question generates others and how asking better questions deepens our understanding of the birds. How do they learn their shared songs? How do those who, like the chestnut-sided warblers, have unique songs develop them? What is the purpose of all the calls and songs? What role do songs play in the evolution of each bird species? How do birds make their sounds? Kroodsma is too good a scientist to give absolute answers and too good a storyteller not to enjoy the mysteries he finds and shares.

Audubon Magazine has a website (magazine.audubon.org/birdsongs) related to this book with sonograms and audio files to play on your computer. In the book, Kroodsma gives advice about collecting bird songs and mentions the free trial version of *Raven*, the sonogram generating program available from the Cornell Ornithological Lab (www.birds.cornell.edu/Raven), and if you get hooked, you can download fully functional *Raven Lite* for only \$25. Kroodsma's book and its CD are available at the Green Free Library in Wellsboro.